

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) A data recording and reproducing apparatus comprising:
a plurality of recording and reproducing means for recording and/or reproducing data containing video and/or audio data on and/or from a nonlinearly-accessible recording medium; and

a plurality of input and output processing means connected to said recording and reproducing means through a predetermined transmission line for processing said data inputted from the outside to output processed data to said recording and reproducing means in a time-division manner and which process said data outputted from said recording and reproducing means in a time-division manner to output processed data to the outside,

wherein said plurality of recording and reproducing means further includes:
at least one parity data recording and reproducing means for recording and/or reproducing parity data, and

wherein said plurality of input and output processing means further includes:
input processing means for dividing said data inputted from the outside to transfer divided data to said plurality of recording and reproducing means, for generating an error-correcting code of said data, and for transferring said error-correcting code to at least one of said parity data recording and reproducing means; and

output processing means for correcting erroneous data by using said error-correcting code outputted from said parity data recording and reproducing means, and for outputting error-corrected data to the outside if an error is detected from said data outputted from said recording and reproducing means,

wherein said error is detected based on status data, which includes a status of said data and parity data, that is returned from said recording and reproducing means to one of the plurality of input and output processing means, and is then added to an error table that includes information regarding an error in the recording and/or reproducing of said data and parity data.

2. (Previously Presented) A data recording and reproducing apparatus according to claim 1,

wherein said input and output processing means include recording data restoring means for restoring data or an error-correcting code, for requesting said data or said error correcting code from a second recording and reproducing means, and outputting said restored data or said error-correcting code to said recording and reproducing means after a trouble in which said data or said error-correcting code cannot be recorded on said recording and reproducing means had been removed.

3. (Original) A data recording and reproducing apparatus according to claim 1, wherein said transmission line is ethernet.

4. (Original) A data recording and reproducing apparatus according to claim 1, wherein said transmission line is an IEEE 1394 transmission line.

5. (Original) A data recording and reproducing apparatus according to claim 1, wherein said transmission line is a fibre channel.

6. (Currently Amended) A data recording and reproducing method comprising the steps of:

processing data containing video and/or audio data inputted from the outside to output processed data to a plurality of recording and reproducing means in a time-division manner;

recording said data on a nonlinearly-accessible recording medium by said recording and reproducing means; reproducing said recorded data from said nonlinearly-accessible recording medium;

outputting said reproduced data from said recording and reproducing means in a time-division manner; and

processing said outputted data and outputting said processed data to the outside comprising the steps of:

a first step of dividing and outputting said data inputted from the outside to said plurality of recording and reproducing means, generating an error-correcting code of said data and outputting said error-correcting code;

a second step of recording said divided data on said recording medium by ~~each~~ a first of said plurality of recording and reproducing means and recording said error-

correcting code on said recording medium by ~~each~~ a second of said plurality recording and reproducing means,

wherein the second of said plurality of recording and reproducing means is a parity data recording and reproducing means;

a third step of reproducing said data from said recording medium by ~~each~~ the first of said plurality of recording and reproducing means, reproducing said error-correcting code from said recording medium by ~~each~~ said second of said plurality of recording and reproducing means and outputting said reproduced data and said reproduced error-correcting code in a time-division manner through a predetermined transmission line; and

a fourth step of correcting erroneous data by using said error-correcting code outputted from said second of said plurality recording and reproducing means and outputting said error-corrected data to the outside if an error is detected from said data outputted from said second of said recording and reproducing means,

wherein said error is detected based on status data, which includes a status of said data and parity data, that is returned from said recording and reproducing means to one of the plurality of input and output processing means;

a fifth step of generating an error table that includes information regarding an error in the recording and/or reproducing of said data and parity data.

7. (Previously Presented) A data recording and reproducing method according to claim 6, wherein said first step further includes a data restoring step of restoring said data or said error-correcting code, for requesting said data or said error correcting code from a second recording and reproducing means, and outputting said restored data or said restored error-

correcting code to said recording and reproducing means after a trouble in which said data or said error-correcting code cannot be recorded on said recording and reproducing means had been removed.

8. (Original) A data recording and reproducing method according to claim 6, wherein said predetermined transmission line is ethernet.

9. (Original) A data recording and reproducing method according to claim 6, wherein said transmission line is an IEEE 1394 transmission line.

10. (Original) A data recording and reproducing method according to claim 6, wherein said transmission line is a fibre channel.